# INSTRUCTIONS for EPA Region 8 States and Tribes for completing the Solid Waste Infrastructure for Recycling (SWIFR) Grant Quality Assurance Project Plan (QAPP) Template

This SWIFR QAPP template is intended for use **only by EPA Region 8 State or Tribal grant recipients** receiving funding from the IIJA and SOS 2.0 Act to document project activities involving **Environmental Information Operations (EIO)** as part of a SWIFR Grant. Complete all sections of this template. When this QAPP Template is completed fully, the content meets EPA QAPP Requirements, QA/R-5.

**PREPARING THE QAPP:**

* For each section in the QAPP Template, guidance is provided in a **comment box located on the righthand side as “NOTE to QAPP Preparer**”. Once the author addresses the comment, please delete the comment box. Text boxes in angle brackets **<Insert here>** are intended for the QAPP Preparer to complete by inserting appropriate text for each section. Enter content within the text box by overwriting the angle brackets.
* If you plan to utilize a **contractor for IT** services to develop data architecture, processes, validation, maintenance, etc., we recommend referring to your information management resources such as a Data Management Plan.
* We recommend avoiding collection of Personally Identifiable Information **(PII**). If you decide to collect PII, you must comply with 5 U.S.C. § 552a and EPA’s Privacy Policy and describe the requirements within the QAPP.
* If any of the elements in the template are not applicable for your project, insert **Not Applicable** and include a statement as to why the element is not relevant to the project.
* If there are plans to **publish information** to a website for public access, you must state in the QAPP how data limitations will be conveyed to users, including the requirement to post a disclaimer onto the website along with the published information. Provide the specific disclaimer text in the QAPP.
* In the QAPP, describe the process for how data/information will be collected, stored, retrieved, and used, and/or **attach** your Data Management Plan **(DMP)** to the QAPP.
* Attach any Standard Operating Procedures **(SOPs)** to the QAPP.

**FINALIZING THE QAPP:**

* **Delete this instruction page and all other instructional comments** after utilizing the guidance in the template and finalizing the document for review and approval.
* **For State DEQs:** All EPA Region 8 State Departments of Environmental Quality or similar (e.g., CDPHE or SD DANR) have an EPA-approved QMP. All SWIFR QAPPs may be prepared, reviewed and approved per the process described in your state QMP. Provide a copy of the approved QAPP (signatures) to your EPA SWIFR Grant Project Officer for their records.
* **For Tribal Governments or other Grant Recipients without an EPA-Region 8 Approved QMP:** Submit your completed QAPP to the EPA SWIFR Grant Project Officer who will coordinate the EPA review and approval of the QAPP.

**QAPP Template Disclaimer:** This template describes a quality assurance approach that could be used for a SWIFR project and has not been developed or reviewed to support other projects.

# Title Page

**U.S. Environmental Protection Agency Region 8**

 **Solid Waste Infrastructure for Recycling Grants**

<Insert Grant Recipient Organization Name

and Address>

**Quality Assurance Project Plan (QAPP)**

 <Insert Final QAPP Title>

<Insert Date of QAPP>

<Insert Period of Performance MM/DD/YYYY to MM/DD/YYYY>

# Approval Page

**Grant Recipient Approvals:**

 Organization: <Insert here>

Project Quality Assurance Officer

Printed Name & Title: <Insert here>

Signature & Date:

Project Manager:

Printed Name & Title: <Insert here>

Signature & Date:

For Grant Recipients without EPA Region 8 Approved QMPs

**EPA Approvals:**

EPA Region 8 Project Officer

Printed Name & Title: <Insert here>

Signature & Date:

EPA Region 8 Quality Assurance Manager (RQAM)

Or Delegated Approving Officer (DAO):

Printed Name & Title: <Insert here>

Signature & Date:

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Revision History

|  |  |
| --- | --- |
| Revision No. | Description of Changes |
| <Insert here> | <Insert here> |

Acronyms

|  |  |
| --- | --- |
| DAO | Delegated Approving Officer |
| DCN | Document Control Number |
| DQI | Data Quality Indicators |
| DQO | Data Quality Objectives |
| EIO | Environmental Information Operations |
| EPA | Environmental Protection Agency |
| PM | Project Manager |
| QAO | Quality Assurance Officer |
| QA | Quality Assurance |
| QAPP | Quality Assurance Project Plan |
| QC | Quality Control |
| RQAM | Regional Quality Assurance Manager |
| SOP | Standard Operating Procedure |
| SWIFR | Solid Waste Infrastructure for Recycling |

# Introduction

<Insert here>

# Project Organization & Distribution List

|  |  |  |  |
| --- | --- | --- | --- |
| **Contact and** **E-mail address** | **Title** | **Organization** | **Responsibilities** |
| Virginia TillTill.Virginia@epa.gov | SWIFR Grant Project Officer | U.S. EPA, Region 8 | <Insert here> |
| <Insert here> | EPA Regional Quality Assurance Manager or Delegated Approving Officer | U.S. EPA, Region 8 | QAPP Review and Approval |
| <Insert here> | Grant Recipient Project Manager | <Insert here> | <Insert here> |
| <Insert here> | Grant Recipient Project Quality Assurance Officer | <Insert here> | <Insert here> |
| <Insert here> | <Insert here> | <Insert here> | <Insert here> |

**Figure 1. Organization Chart**

<Insert here>

Project Quality Assurance Officer

<Insert here>

EPA Region 8 Project Officer

<Insert here>

Project Manager

<Insert here>

Field Staff

<Insert here>

Contractor or Other



# Problem Definition, Background and Project Description

<Insert the Problem Definition and Background here>

<Insert Project Description here>

Project Objectives:

Project Site(s) or Study Area(s):

# Project Schedule

<Insert here>

**Figure 2. Schedule**

|  |  |  |
| --- | --- | --- |
| Activities | Group/Person responsiblefor activity completion | Timeframe work will be done |
| <Insert Here> | <Insert Here> | <Insert Here> |
| <Insert Here> | <Insert Here> | <Insert Here> |
| <Insert Here> | <Insert Here> | <Insert Here> |

# Data Quality Objectives and Indicators

<Insert Data Quality Objectives statement here>

1. State the Problem: <Insert what necessitates the study here>
2. Identify the Goal of the Study: <Insert how information will be used to meet the objectives here>
3. Identify Information Inputs: <Insert what information is needed to answer the study questions here>
4. Define the Study Boundaries: <Insert target population & characteristics, geographical boundaries, temporal limits, the scale of inference here>
5. Develop the Analytic Approach: <Insert the parameters of interest and the logic for drawing conclusions from findings here>
6. Specify Performance or Acceptance Criteria: <Insert the probability limits, performance criteria for new data or acceptance criteria for existing data use here>
7. Develop the Plan for Obtaining the Data: <Insert the plans to meet the performance criteria defined here>

|  |  |  |
| --- | --- | --- |
| **Data Quality Indicators** | **Quality Control Activities****and Checks** |  **Project Goals** |
| Precision | <Insert Here> | <Insert Here> |
| Bias | <Insert Here> | <Insert Here> |
| Accuracy | <Insert Here> | <Insert Here> |
| Representativeness | <Insert Here> | <Insert Here> |
| Comparability | <Insert Here> | <Insert Here> |
| Completeness | <Insert Here> | <Insert Here> |
| Sensitivity | <Insert Here> | <Insert Here> |
| Measurement range | <Insert Here> | <Insert Here> |

# Training and Specialized Experience

<Insert here>

# Documentation and Records

<Insert here>

# Design and Data Collection Methods

<Insert here>

|  |  |  |
| --- | --- | --- |
|  | SOPReference | User Manuals |
| <Global Position System> | <Insert here> | <Insert here> |
| <Photos or Video> | <Insert here> | <Insert here> |
| <Electronic Data Capture Device> | <Insert here> | <Insert here> |
| <Web App> | <Insert here> | <Insert here> |
| <Security, Privacy and Publishing> | <Insert here> | <Insert here> |
| <Data Storage, Transfer and Backup> | <Insert here> | <Insert here> |

# Existing Data and Data from Other Sources

<Insert here>

# Data Management

<Insert here-This section should be detailed and describe the complete data life cycle>

<Insert here-Describe the project data management process>

<Insert here-Describe the record-keeping procedures, document control, data storage, retrieval and or cite SOPs>

<Insert here-Describe data handling equipment procedures to process, analyze and transmit data reliably and accurately, along with acceptability of hardware and software configurations>

<Insert here-Identify the individual(s) responsible for data management>

<Insert here-Attach and reference checklists or forms that will be used>

<Insert here-Attach your Data Management Plan>

# Reporting, Oversight and Assessments

<Insert what type of report(s) will be generated? E.g., existing data projects, model evaluation, assessments here>

<Insert what will the report(s) include? E.g., raw data, specific actions here>

<Insert who will receive the report(s) here>

<Insert who is responsible for preparing and delivering to the recipient(s) here>

<Insert for assessment reports, who is responsible for implementing and monitoring Corrective Actions here>

# Data Review and Usability

<Insert here>

# References

U.S. EPA, Privacy Policy (CIO 2151.1), September 2018 or most recent version. Web site: https://www.epa.gov/irmpoli8/current-information-directives

U.S. EPA, Requirements for Quality Assurance Project Plans (EPA QA/R-5), March 2001 or most recent revision. Web site: https://www.epa.gov/irmpoli8/current-information-directives

U.S. EPA, Guidance for the Data Quality Objectives Process (EPA QA/G-4), EPA/600/R-96/055, July 2000 or most recent revision. Web site: https://www.epa.gov/quality/quality-assurance-project-plan-development-tool

U.S. EPA, Guidance for Preparing Standard Operating Procedures (EPA QA/G-6), EPA/600/B-07/001, April 2007 or most recent revision. Web site: <https://www.epa.gov/quality/quality-assurance-project-plan-development-tool>

US EPA, 2003, A Summary of General Assessment Factors for Evaluating the Quality of Scientific and Technical Information. Web site: https://www.epa.gov/sites/default/files/2015-01/documents/assess2.pdf

Guidance for Data Quality Assessment: Practical Methods for Data Analysis (EPA QA/G-9), QA00 Version (EPA, 2000b)

# List of Figures

# [*Figure 1 Location Map(s)*](#Figure3)

# Appendices

# *Appendix A*

# *Standard Operating Procedures and User Manuals*

#

# *Appendix B*

# *Data Management Plan*

# *Appendix C*

# *Cross-reference Between SWIFR QAPP and EPA QA/R-5 Elements*

|  |
| --- |
| **Project Management** |
| **SWIFR QAPP Element** | **Agency QAPP Element (EPA QA/R-5)** |
| **Title Page****Approval Page****Table of Contents** | A1. Title and Approval SheetA2. Table of Contents |
| **Introduction** **Problem Definition, Background and Project Description** | A5. Problem Definition and BackgroundA6. Project/Task Description |
| **Data Quality Objectives and Indicators****Reporting, Oversight and Assessments** | A7. Quality Objectives and CriteriaC2. Reports to ManagementC1. Assessments and Response Actions |
| **Project Organization & Distribution List****Training and Specialized Experience** | A3. Distribution ListA4. Project/Task OrganizationA8. Special Training/Certifications |
| **Documentation and Records****Data Management** | A9. Documents and RecordsB10. Data Management |
| **Project Implementation** |   |
| **SWIFR QAPP Element** | **Agency QAPP Element (EPA QA/R-5)** |
| **Design and Data Collection Methods****Existing Data and Data from Other Sources****Data Review and Usability** | B1. Process Design (Experimental Design)B2. Sampling MethodsB9. Non-Direct MeasurementsD1. Data Review, Verification, and ValidationD2. Verification and Validation MethodsD3. Reconciliation with User Requirements |